



OIPE

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/10/099,700A

DATE: 06/11/2002  
 TIME: 16:55:56

Input Set : A:\PTO.VSK.txt  
 Output Set: N:\CRF3\06112002\J099700A.raw

ENTERED

3 <110> APPLICANT: Edwin L. Madison  
 4 Edgar O. Ong  
 6 <120> TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING TRANSMEMBRANE SERINE  
 PROTEASE 7, THE  
 7 ENCODED POLYPEPTIDES AND METHODS BASED THEREON  
 9 <130> FILE REFERENCE: 24745-1613  
 C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/099,700A  
 C--> 12 <141> CURRENT FILING DATE: 2002-05-24  
 14 <150> PRIOR APPLICATION NUMBER: 60/275,592  
 15 <151> PRIOR FILING DATE: 2001-03-13  
 17 <160> NUMBER OF SEQ ID NOS: 22  
 19 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 21 <210> SEQ ID NO: 1  
 22 <211> LENGTH: 3147  
 23 <212> TYPE: DNA  
 24 <213> ORGANISM: Homo Sapien  
 26 <220> FEATURE:  
 27 <221> NAME/KEY: CDS  
 28 <222> LOCATION: (23)...(2589)  
 29 <223> OTHER INFORMATION: Nucleotide sequence encoding MTSP1  
 31 <300> PUBLICATION INFORMATION:  
 32 <301> AUTHORS: O'Brien, T.J. and Tanimoto, H.  
 33 <308> DATABASE ACCESSION NO: GenBank #AR081724  
 34 <309> DATABASE ENTRY DATE: 2000-08-31  
 35 <310> PATENT DOC NO: 5,972,616  
 36 <311> PATENT FILING DATE: 1998-02-20  
 37 <312> PUBLICATION DATE: 1999-10-26  
 39 <400> SEQUENCE: 1  
 40 tcaagagcgg cctcggggta cc atg ggg agc gat cgg gcc cgc aag ggc gga 52  
 41 Met Gly Ser Asp Arg Ala Arg Lys Gly Gly  
 42 1 5 10  
 44 ggg ggc ccg aag gac ttc ggc gcg gga ctc aag tac aac tcc cgg cac 100  
 45 Gly Gly Pro Lys Asp Phe Gly Ala Gly Leu Lys Tyr Asn Ser Arg His  
 46 15 20 25  
 48 gag aaa gtg aat ggc ttg gag gaa ggc gtg gag ttc ctg cca gtc aac 148  
 49 Glu Lys Val Asn Gly Leu Glu Glu Gly Val Glu Phe Leu Pro Val Asn  
 50 30 35 40  
 52 aac gtc aag aag gtg gaa aag cat ggc ccg ggg cgc tgg gtg gtg ctg 196  
 53 Asn Val Lys Lys Val Glu Lys His Gly Pro Gly Arg Trp Val Val Leu  
 54 45 50 55  
 56 gca gcc gtg ctg atc ggc ctc ctc ttg gtc ttg ctg ggg atc ggc ttc 244  
 57 Ala Ala Val Leu Ile Gly Leu Leu Leu Val Leu Leu Gly Ile Gly Phe  
 58 60 65 70  
 60 ctg gtg tgg cat ttg cag tac cgg gac gtg cgt gtc cag aag gtc ttc 292

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|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 61  | Leu | Val | Trp | His | Leu | Gln | Tyr | Arg | Asp | Val | Arg | Val | Gln | Lys | Val | Phe |      |
| 62  | 75  |     |     |     | 80  |     |     |     |     | 85  |     |     |     |     |     | 90  |      |
| 64  | aat | ggc | tac | atg | agg | atc | aca | aat | gag | aat | ttt | gtg | gat | gcc | tac | gag | 340  |
| 65  | Asn | Gly | Tyr | Met | Arg | Ile | Thr | Asn | Glu | Asn | Phe | Val | Asp | Ala | Tyr | Glu |      |
| 66  |     |     |     | 95  |     |     |     |     | 100 |     |     |     |     | 105 |     |     |      |
| 68  | aac | tcc | aac | tcc | act | gag | ttt | gta | agc | ctg | gcc | agc | aag | gtg | aag | gac | 388  |
| 69  | Asn | Ser | Asn | Ser | Thr | Glu | Phe | Val | Ser | Leu | Ala | Ser | Lys | Val | Lys | Asp |      |
| 70  |     |     |     | 110 |     |     |     |     | 115 |     |     |     |     | 120 |     |     |      |
| 72  | gcg | ctg | aag | ctg | ctg | tac | agc | gga | gtc | cca | ttc | ctg | ggc | ccc | tac | cac | 436  |
| 73  | Ala | Leu | Lys | Leu | Leu | Tyr | Ser | Gly | Val | Pro | Phe | Leu | Gly | Pro | Tyr | His |      |
| 74  |     |     |     | 125 |     |     |     |     | 130 |     |     |     |     | 135 |     |     |      |
| 76  | aag | gag | tcg | gct | gtg | acg | gcc | ttc | agc | gag | ggc | agc | gtc | atc | gcc | tac | 484  |
| 77  | Lys | Glu | Ser | Ala | Val | Thr | Ala | Phe | Ser | Glu | Gly | Ser | Val | Ile | Ala | Tyr |      |
| 78  |     |     |     | 140 |     |     |     |     | 145 |     |     |     |     | 150 |     |     |      |
| 80  | tac | tgg | tct | gag | ttc | agc | atc | ccg | cag | cac | ctg | gtg | gag | gag | gcc | gag | 532  |
| 81  | Tyr | Trp | Ser | Glu | Phe | Ser | Ile | Pro | Gln | His | Leu | Val | Glu | Glu | Ala | Glu |      |
| 82  | 155 |     |     |     | 160 |     |     |     |     | 165 |     |     |     | 170 |     |     |      |
| 84  | cgc | gtc | atg | gcc | gag | gag | cgc | gta | gtc | atg | ctg | ccc | ccg | cgg | gcg | cgc | 580  |
| 85  | Arg | Val | Met | Ala | Glu | Glu | Arg | Val | Val | Met | Leu | Pro | Pro | Arg | Ala | Arg |      |
| 86  |     |     |     | 175 |     |     |     |     | 180 |     |     |     |     | 185 |     |     |      |
| 88  | tcc | ctg | aag | tcc | ttt | gtg | gtc | acc | tca | gtg | gtg | gct | ttc | ccc | acg | gac | 628  |
| 89  | Ser | Leu | Lys | Ser | Phe | Val | Val | Thr | Ser | Val | Val | Ala | Phe | Pro | Thr | Asp |      |
| 90  |     |     |     | 190 |     |     |     |     | 195 |     |     |     |     | 200 |     |     |      |
| 92  | tcc | aaa | aca | gta | cag | agg | acc | cag | gac | aac | agc | tgc | agc | ttt | ggc | ctg | 676  |
| 93  | Ser | Lys | Thr | Val | Gln | Arg | Thr | Gln | Asp | Asn | Ser | Cys | Ser | Phe | Gly | Leu |      |
| 94  |     |     |     | 205 |     |     |     |     | 210 |     |     |     |     | 215 |     |     |      |
| 96  | cac | gcc | cgc | ggt | gtg | gag | ctg | atg | cgc | ttc | acc | acg | ccc | ggc | ttc | cct | 724  |
| 97  | His | Ala | Arg | Gly | Val | Glu | Leu | Met | Arg | Phe | Thr | Thr | Pro | Gly | Phe | Pro |      |
| 98  |     |     |     | 220 |     |     |     |     | 225 |     |     |     |     | 230 |     |     |      |
| 100 | gac | agc | ccc | tac | ccc | gct | cat | gcc | cgc | tgc | cag | tgg | gcc | ctg | cgg | ggg | 772  |
| 101 | Asp | Ser | Pro | Tyr | Pro | Ala | His | Ala | Arg | Cys | Gln | Trp | Ala | Leu | Arg | Gly |      |
| 102 | 235 |     |     |     | 240 |     |     |     |     | 245 |     |     |     | 250 |     |     |      |
| 104 | gac | gcc | gac | tca | gtg | ctg | agc | ctc | acc | ttc | cgc | agc | ttt | gac | ctt | gcg | 820  |
| 105 | Asp | Ala | Asp | Ser | Val | Leu | Ser | Leu | Thr | Phe | Arg | Ser | Phe | Asp | Leu | Ala |      |
| 106 |     |     |     | 255 |     |     |     |     | 260 |     |     |     |     | 265 |     |     |      |
| 108 | tcc | tgc | gac | gag | cgc | ggc | agc | gac | ctg | gtg | acg | gtg | tac | aac | acc | ctg | 868  |
| 109 | Ser | Cys | Asp | Glu | Arg | Gly | Ser | Asp | Leu | Val | Thr | Val | Tyr | Asn | Thr | Leu |      |
| 110 |     |     |     | 270 |     |     |     |     | 275 |     |     |     |     | 280 |     |     |      |
| 112 | agc | ccc | atg | gag | ccc | cac | gcc | ctg | gtg | cag | ttg | tgt | ggc | acc | tac | cct | 916  |
| 113 | Ser | Pro | Met | Glu | Pro | His | Ala | Leu | Val | Gln | Leu | Cys | Gly | Thr | Tyr | Pro |      |
| 114 |     |     |     | 285 |     |     |     |     | 290 |     |     |     |     | 295 |     |     |      |
| 116 | ccc | tcc | tac | aac | ctg | acc | ttc | cac | tcc | tcc | cag | aac | gtc | ctg | ctc | atc | 964  |
| 117 | Pro | Ser | Tyr | Asn | Leu | Thr | Phe | His | Ser | Ser | Gln | Asn | Val | Leu | Leu | Ile |      |
| 118 |     |     |     | 300 |     |     |     |     | 305 |     |     |     |     | 310 |     |     |      |
| 120 | aca | ctg | ata | acc | aac | act | gag | cgg | cgg | cat | ccc | ggc | ttt | gag | gcc | acc | 1012 |
| 121 | Thr | Leu | Ile | Thr | Asn | Thr | Glu | Arg | Arg | His | Pro | Gly | Phe | Glu | Ala | Thr |      |
| 122 | 315 |     |     |     | 320 |     |     |     |     | 325 |     |     |     | 330 |     |     |      |
| 124 | ttc | ttc | cag | ctg | cct | agg | atg | agc | agc | tgt | gga | ggc | cgc | tta | cgt | aaa | 1060 |
| 125 | Phe | Phe | Gln | Leu | Pro | Arg | Met | Ser | Ser | Cys | Gly | Gly | Arg | Leu | Arg | Lys |      |

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| 126 |     |     |     | 335 |     |     |     | 340 |     |     |     | 345 |     |     |     |     |      |
| 128 | gcc | cag | ggg | aca | ttc | aac | agc | ccc | tac | tac | cca | ggc | cac | tac | cca | ccc | 1108 |
| 129 | Ala | Gln | Gly | Thr | Phe | Asn | Ser | Pro | Tyr | Tyr | Pro | Gly | His | Tyr | Pro | Pro |      |
| 130 |     |     |     | 350 |     |     |     | 355 |     |     |     | 360 |     |     |     |     |      |
| 132 | aac | att | gac | tgc | aca | tgg | aac | att | gag | gtg | ccc | aac | aac | cag | cat | gtg | 1156 |
| 133 | Asn | Ile | Asp | Cys | Thr | Trp | Asn | Ile | Glu | Val | Pro | Asn | Asn | Gln | His | Val |      |
| 134 |     |     | 365 |     |     |     | 370 |     |     |     |     | 375 |     |     |     |     |      |
| 136 | aag | gtg | agc | ttc | aaa | ttc | ttc | tac | ctg | ctg | gag | ccc | ggc | gtg | cct | gcg | 1204 |
| 137 | Lys | Val | Ser | Phe | Lys | Phe | Phe | Tyr | Leu | Leu | Glu | Pro | Gly | Val | Pro | Ala |      |
| 138 |     | 380 |     |     |     |     | 385 |     |     |     | 390 |     |     |     |     |     |      |
| 140 | ggc | acc | tgc | ccc | aag | gac | tac | gtg | gag | atc | aat | ggg | gag | aaa | tac | tgc | 1252 |
| 141 | Gly | Thr | Cys | Pro | Lys | Asp | Tyr | Val | Glu | Ile | Asn | Gly | Glu | Lys | Tyr | Cys |      |
| 142 | 395 |     |     |     |     | 400 |     |     |     |     | 405 |     |     |     |     | 410 |      |
| 144 | gga | gag | agg | tcc | cag | ttc | gtc | gtc | acc | agc | aac | agc | aac | aag | atc | aca | 1300 |
| 145 | Gly | Glu | Arg | Ser | Gln | Phe | Val | Val | Thr | Ser | Asn | Ser | Asn | Lys | Ile | Thr |      |
| 146 |     |     |     | 415 |     |     |     | 420 |     |     |     | 425 |     |     |     |     |      |
| 148 | gtt | cgc | ttc | cac | tca | gat | cag | tcc | tac | acc | gac | acc | ggc | ttc | tta | gct | 1348 |
| 149 | Val | Arg | Phe | His | Ser | Asp | Gln | Ser | Tyr | Thr | Asp | Thr | Gly | Phe | Leu | Ala |      |
| 150 |     |     | 430 |     |     |     |     | 435 |     |     |     | 440 |     |     |     |     |      |
| 152 | gaa | tac | ctc | tcc | tac | gac | tcc | agt | gac | cca | tgc | ccg | ggg | cag | ttc | acg | 1396 |
| 153 | Glu | Tyr | Leu | Ser | Tyr | Asp | Ser | Ser | Asp | Pro | Cys | Pro | Gly | Gln | Phe | Thr |      |
| 154 |     |     | 445 |     |     |     | 450 |     |     |     | 455 |     |     |     |     |     |      |
| 156 | tgc | cgc | acg | ggg | cgg | tgt | atc | cgg | aag | gag | ctg | cgc | tgt | gat | ggc | tgg | 1444 |
| 157 | Cys | Arg | Thr | Gly | Arg | Cys | Ile | Arg | Lys | Glu | Leu | Arg | Cys | Asp | Gly | Trp |      |
| 158 |     | 460 |     |     |     | 465 |     |     |     |     | 470 |     |     |     |     |     |      |
| 160 | gcc | gac | tgc | acc | gac | cac | agc | gat | gag | ctc | aac | tgc | agt | tgc | gac | gcc | 1492 |
| 161 | Ala | Asp | Cys | Thr | Asp | His | Ser | Asp | Glu | Leu | Asn | Cys | Ser | Cys | Asp | Ala |      |
| 162 | 475 |     |     |     | 480 |     |     |     | 485 |     |     |     |     |     | 490 |     |      |
| 164 | ggc | cac | cag | ttc | acg | tgc | aag | aac | aag | ttc | tgc | aag | ccc | ctc | ttc | tgg | 1540 |
| 165 | Gly | His | Gln | Phe | Thr | Cys | Lys | Asn | Lys | Phe | Cys | Lys | Pro | Leu | Phe | Trp |      |
| 166 |     |     | 495 |     |     |     |     | 500 |     |     |     | 505 |     |     |     |     |      |
| 168 | gtc | tgc | gac | agt | gtg | aac | gac | tgc | gga | gac | aac | agc | gac | gag | cag | ggg | 1588 |
| 169 | Val | Cys | Asp | Ser | Val | Asn | Asp | Cys | Gly | Asp | Asn | Ser | Asp | Glu | Gln | Gly |      |
| 170 |     |     | 510 |     |     |     |     | 515 |     |     |     | 520 |     |     |     |     |      |
| 172 | tgc | agt | tgt | ccg | gcc | cag | acc | ttc | agg | tgt | tcc | aat | ggg | aag | tgc | ctc | 1636 |
| 173 | Cys | Ser | Cys | Pro | Ala | Gln | Thr | Phe | Arg | Cys | Ser | Asn | Gly | Lys | Cys | Leu |      |
| 174 |     |     | 525 |     |     |     | 530 |     |     |     |     | 535 |     |     |     |     |      |
| 176 | tcg | aaa | agc | cag | cag | tgc | aat | ggg | aag | gac | gac | tgt | ggg | gac | ggg | tcc | 1684 |
| 177 | Ser | Lys | Ser | Gln | Gln | Cys | Asn | Gly | Lys | Asp | Asp | Cys | Gly | Asp | Gly | Ser |      |
| 178 |     | 540 |     |     |     | 545 |     |     |     |     | 550 |     |     |     |     |     |      |
| 180 | gac | gag | gcc | tcc | tgc | ccc | aag | gtg | aac | gtc | gtc | act | tgt | acc | aaa | cac | 1732 |
| 181 | Asp | Glu | Ala | Ser | Cys | Pro | Lys | Val | Asn | Val | Val | Thr | Cys | Thr | Lys | His |      |
| 182 | 555 |     |     |     | 560 |     |     |     |     |     | 565 |     |     |     | 570 |     |      |
| 184 | acc | tac | cgc | tgc | ctc | aat | ggg | ctc | tgc | ttg | agc | aag | ggc | aac | cct | gag | 1780 |
| 185 | Thr | Tyr | Arg | Cys | Leu | Asn | Gly | Leu | Cys | Leu | Ser | Lys | Gly | Asn | Pro | Glu |      |
| 186 |     |     | 575 |     |     |     |     | 580 |     |     |     | 585 |     |     |     |     |      |
| 188 | tgt | gac | ggg | aag | gag | gac | tgt | agc | gac | ggc | tca | gat | gag | aag | gac | tgc | 1828 |
| 189 | Cys | Asp | Gly | Lys | Glu | Asp | Cys | Ser | Asp | Gly | Ser | Asp | Glu | Lys | Asp | Cys |      |
| 190 |     |     | 590 |     |     |     |     | 595 |     |     |     | 600 |     |     |     |     |      |

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| 192 | gac        | tgt        | ggg        | ctg        | cgg        | tca        | ttc | acg | aga | cag | gct | cgt | gtt | gtt | ggg        | ggc | 1876 |
| 193 | Asp        | Cys        | Gly        | Leu        | Arg        | Ser        | Phe | Thr | Arg | Gln | Ala | Arg | Val | Val | Gly        | Gly |      |
| 194 |            |            | 605        |            |            |            |     | 610 |     |     |     |     | 615 |     |            |     |      |
| 196 | acg        | gat        | gcg        | gat        | gag        | ggc        | gag | tgg | ccc | tgg | cag | gta | agc | ctg | cat        | gct | 1924 |
| 197 | Thr        | Asp        | Ala        | Asp        | Glu        | Gly        | Glu | Trp | Pro | Trp | Gln | Val | Ser | Leu | His        | Ala |      |
| 198 |            |            | 620        |            |            |            | 625 |     |     |     |     | 630 |     |     |            |     |      |
| 200 | ctg        | ggc        | cag        | ggc        | cac        | atc        | tgc | ggt | gct | tcc | ctc | atc | tct | ccc | aac        | tgg | 1972 |
| 201 | Leu        | Gly        | Gln        | Gly        | His        | Ile        | Cys | Gly | Ala | Ser | Leu | Ile | Ser | Pro | Asn        | Trp |      |
| 202 |            |            | 635        |            |            |            | 640 |     |     |     |     | 645 |     |     |            | 650 |      |
| 204 | ctg        | gtc        | tct        | gcc        | gca        | cac        | tgc | tac | atc | gat | gac | aga | gga | ttc | agg        | tac | 2020 |
| 205 | Leu        | Val        | Ser        | Ala        | Ala        | His        | Cys | Tyr | Ile | Asp | Asp | Arg | Gly | Phe | Arg        | Tyr |      |
| 206 |            |            |            |            | 655        |            |     |     |     | 660 |     |     |     |     | 665        |     |      |
| 208 | tca        | gac        | ccc        | acg        | cag        | tgg        | acg | gcc | ttc | ctg | ggc | ttg | cac | gac | cag        | agc | 2068 |
| 209 | Ser        | Asp        | Pro        | Thr        | Gln        | Trp        | Thr | Ala | Phe | Leu | Gly | Leu | His | Asp | Gln        | Ser |      |
| 210 |            |            |            | 670        |            |            |     |     | 675 |     |     |     |     | 680 |            |     |      |
| 212 | cag        | cgc        | agc        | gcc        | cct        | ggg        | gtg | cag | gag | cgc | agg | ctc | aag | cgc | atc        | atc | 2116 |
| 213 | Gln        | Arg        | Ser        | Ala        | Pro        | Gly        | Val | Gln | Glu | Arg | Arg | Leu | Lys | Arg | Ile        | Ile |      |
| 214 |            |            | 685        |            |            |            |     | 690 |     |     |     |     | 695 |     |            |     |      |
| 216 | tcc        | cac        | ccc        | ttc        | ttc        | aat        | gac | ttc | acc | ttc | gac | tat | gac | atc | gcg        | ctg | 2164 |
| 217 | Ser        | His        | Pro        | Phe        | Phe        | Asn        | Asp | Phe | Thr | Phe | Asp | Tyr | Asp | Ile | Ala        | Leu |      |
| 218 |            | 700        |            |            |            |            | 705 |     |     |     |     | 710 |     |     |            |     |      |
| 220 | ctg        | gag        | ctg        | gag        | aaa        | ccg        | gca | gag | tac | agc | tcc | atg | gtg | cgg | ccc        | atc | 2212 |
| 221 | Leu        | Glu        | Leu        | Glu        | Lys        | Pro        | Ala | Glu | Tyr | Ser | Ser | Met | Val | Arg | Pro        | Ile |      |
| 222 |            | 715        |            |            |            | 720        |     |     |     | 725 |     |     |     |     |            | 730 |      |
| 224 | tgc        | ctg        | ccg        | gac        | gcc        | tcc        | cat | gtc | ttc | cct | gcc | ggc | aag | gcc | atc        | tgg | 2260 |
| 225 | Cys        | Leu        | Pro        | Asp        | Ala        | Ser        | His | Val | Phe | Pro | Ala | Gly | Lys | Ala | Ile        | Trp |      |
| 226 |            |            |            | 735        |            |            |     |     |     | 740 |     |     |     |     | 745        |     |      |
| 228 | gtc        | acg        | ggc        | tgg        | gga        | cac        | acc | cag | tat | gga | ggc | act | ggc | gcg | ctg        | atc | 2308 |
| 229 | Val        | Thr        | Gly        | Trp        | Gly        | His        | Thr | Gln | Tyr | Gly | Gly | Thr | Gly | Ala | Leu        | Ile |      |
| 230 |            |            |            | 750        |            |            |     |     | 755 |     |     |     |     | 760 |            |     |      |
| 232 | ctg        | caa        | aag        | ggt        | gag        | atc        | cgc | gtc | atc | aac | cag | acc | acc | tgc | gag        | aac | 2356 |
| 233 | Leu        | Gln        | Lys        | Gly        | Glu        | Ile        | Arg | Val | Ile | Asn | Gln | Thr | Thr | Cys | Glu        | Asn |      |
| 234 |            |            | 765        |            |            |            |     | 770 |     |     |     |     | 775 |     |            |     |      |
| 236 | ctc        | ctg        | ccg        | cag        | cag        | atc        | acg | ccg | cgc | atg | atg | tgc | gtg | ggc | ttc        | ctc | 2404 |
| 237 | Leu        | Leu        | Pro        | Gln        | Gln        | Ile        | Thr | Pro | Arg | Met | Met | Cys | Val | Gly | Phe        | Leu |      |
| 238 |            | 780        |            |            |            |            | 785 |     |     |     |     | 790 |     |     |            |     |      |
| 240 | agc        | ggc        | ggc        | gtg        | gac        | tcc        | tgc | cag | ggt | gat | tcc | ggg | gga | ccc | ctg        | tcc | 2452 |
| 241 | Ser        | Gly        | Gly        | Val        | Asp        | Ser        | Cys | Gln | Gly | Asp | Ser | Gly | Gly | Pro | Leu        | Ser |      |
| 242 |            | 795        |            |            |            | 800        |     |     |     |     | 805 |     |     |     | 810        |     |      |
| 244 | agc        | gtg        | gag        | gcg        | gat        | ggg        | cgg | atc | ttc | cag | gcc | ggt | gtg | gtg | agc        | tgg | 2500 |
| 245 | Ser        | Val        | Glu        | Ala        | Asp        | Gly        | Arg | Ile | Phe | Gln | Ala | Gly | Val | Val | Ser        | Trp |      |
| 246 |            |            |            | 815        |            |            |     |     |     | 820 |     |     |     |     | 825        |     |      |
| 248 | gga        | gac        | ggc        | tgc        | gct        | cag        | agg | aac | aag | cca | ggc | gtg | tac | aca | agg        | ctc | 2548 |
| 249 | Gly        | Asp        | Gly        | Cys        | Ala        | Gln        | Arg | Asn | Lys | Pro | Gly | Val | Tyr | Thr | Arg        | Leu |      |
| 250 |            |            |            | 830        |            |            |     |     | 835 |     |     |     |     | 840 |            |     |      |
| 252 | cct        | ctg        | ttt        | cgg        | gac        | tgg        | atc | aaa | gag | aac | act | ggg | gta | ta  | ggggccgggg |     | 2599 |
| 253 | Pro        | Leu        | Phe        | Arg        | Asp        | Trp        | Ile | Lys | Glu | Asn | Thr | Gly | Val |     |            |     |      |
| 254 |            |            | 845        |            |            |            |     | 850 |     |     |     |     | 855 |     |            |     |      |
| 256 | ccacccaaat | gtgtacacct | gcggggccac | ccatcgtcca | ccccagtgtg | cacgcctgca |     |     |     |     |     |     |     |     |            |     | 2659 |

## RAW SEQUENCE LISTING

DATE: 06/11/2002

PATENT APPLICATION: US/10/099,700A

TIME: 16:55:56

Input Set : A:\PTO.VSK.txt

Output Set: N:\CRF3\06112002\J099700A.raw

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257 ggctggagac tggaccgctg actgcaccag cgccccccaga acatacactg tgaactcaat 2719
258 ctccagggct ccaaattctgc ctagaaaacc tctcgcttcc tcagcctcca aagtggagct 2779
259 gggaggtaga aggggaggac actggtggtt ctactgacct aactgggggc aaaggtttga 2839
260 agacacagcc tcccccgcca gcccgaagct gggccgaggc gcgtttgtgt atatctgcct 2899
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262 ggctgccgga tctgggctgt ggggcccttg ggccacgctc ttgaggaagc ccaggctcgg 3019
263 aggaccctgg aaaacagacg ggtctgagac tgaaattggt ttaccagctc ccagggtgga 3079
264 cttcagtgtg tgtatttgtg taaatgggta aaacaattta tttcttttta aaaaaaaaaa 3139
265 aaaaaaaaaa 3147
267 <210> SEQ ID NO: 2
268 <211> LENGTH: 855
269 <212> TYPE: PRT
270 <213> ORGANISM: Homo Sapien
272 <400> SEQUENCE: 2
273 Met Gly Ser Asp Arg Ala Arg Lys Gly Gly Gly Gly Pro Lys Asp Phe
274 1 5 10 15
275 Gly Ala Gly Leu Lys Tyr Asn Ser Arg His Glu Lys Val Asn Gly Leu
276 20 25 30
277 Glu Glu Gly Val Glu Phe Leu Pro Val Asn Asn Val Lys Lys Val Glu
278 35 40 45
279 Lys His Gly Pro Gly Arg Trp Val Val Leu Ala Ala Val Leu Ile Gly
280 50 55 60
281 Leu Leu Leu Val Leu Leu Gly Ile Gly Phe Leu Val Trp His Leu Gln
282 65 70 75 80
283 Tyr Arg Asp Val Arg Val Gln Lys Val Phe Asn Gly Tyr Met Arg Ile
284 85 90 95
285 Thr Asn Glu Asn Phe Val Asp Ala Tyr Glu Asn Ser Asn Ser Thr Glu
286 100 105 110
287 Phe Val Ser Leu Ala Ser Lys Val Lys Asp Ala Leu Lys Leu Leu Tyr
288 115 120 125
289 Ser Gly Val Pro Phe Leu Gly Pro Tyr His Lys Glu Ser Ala Val Thr
290 130 135 140
291 Ala Phe Ser Glu Gly Ser Val Ile Ala Tyr Tyr Trp Ser Glu Phe Ser
292 145 150 155 160
293 Ile Pro Gln His Leu Val Glu Glu Ala Glu Arg Val Met Ala Glu Glu
294 165 170 175
295 Arg Val Val Met Leu Pro Pro Arg Ala Arg Ser Leu Lys Ser Phe Val
296 180 185 190
297 Val Thr Ser Val Val Ala Phe Pro Thr Asp Ser Lys Thr Val Gln Arg
298 195 200 205
299 Thr Gln Asp Asn Ser Cys Ser Phe Gly Leu His Ala Arg Gly Val Glu
300 210 215 220
301 Leu Met Arg Phe Thr Thr Pro Gly Phe Pro Asp Ser Pro Tyr Pro Ala
302 225 230 235 240
303 His Ala Arg Cys Gln Trp Ala Leu Arg Gly Asp Ala Asp Ser Val Leu
304 245 250 255
305 Ser Leu Thr Phe Arg Ser Phe Asp Leu Ala Ser Cys Asp Glu Arg Gly
306 260 265 270
307 Ser Asp Leu Val Thr Val Tyr Asn Thr Leu Ser Pro Met Glu Pro His

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VERIFICATION SUMMARY

PATENT APPLICATION: US/10/099,700A

DATE: 06/11/2002

TIME: 16:55:57

Input Set : A:\PTO.VSK.txt

Output Set: N:\CRF3\06112002\J099700A.raw

L:11 M:270 C: Current Application Number differs, Replaced Application Number  
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date